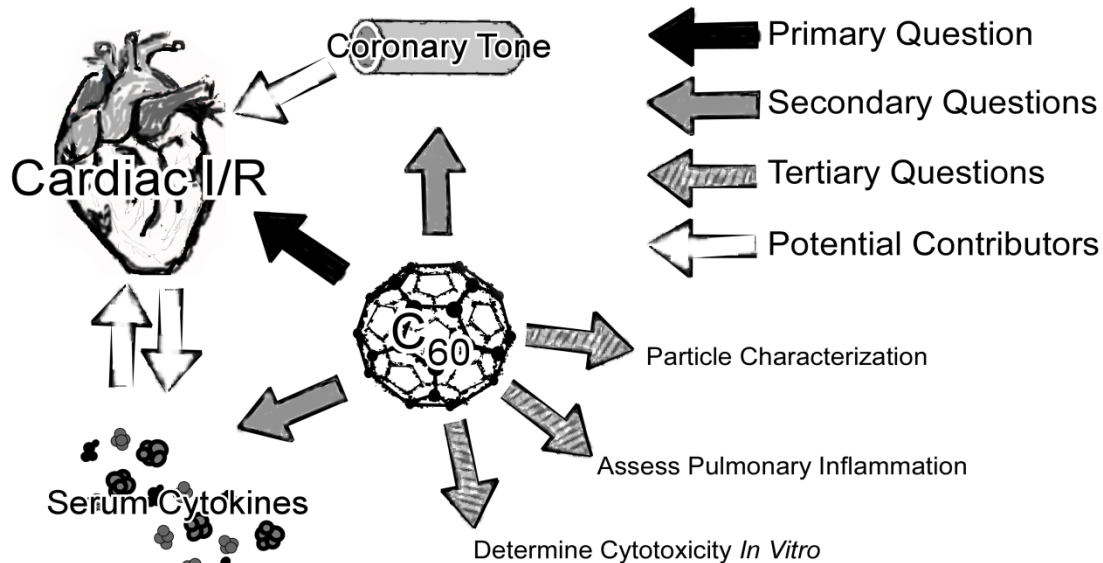


Experimental Design

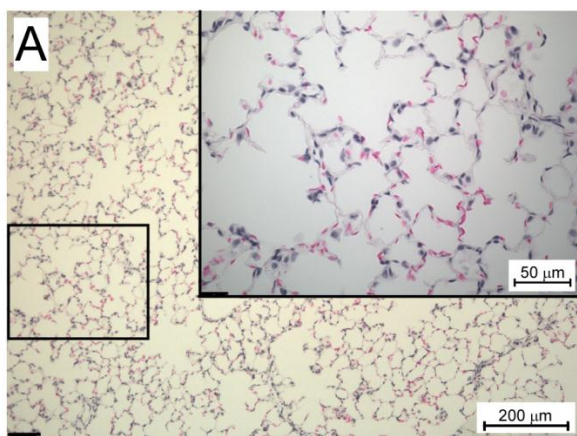


IT C ₆₀ Effect on	Cardiac I/R?	Serum Cytokines?	Coronary Pharmacology?	Coronary ET-1 Stress?	Coronary ET-1 Stress w/ Male IT?
Tier 2 Question	Compared to IV?	I/R Effect?	Compared to IV?	Compared to IV?	Cyclooxygenase Inhibition?
Tier 3 Question	Gender Effect?	Compared to IV?	Gender Effect?	Gender Effect?	
Tier 4 Question		Gender Effect?			

Abbreviations: I/R - ischemia/reperfusion; IT - intratracheal; IV - intravenous; ET-1 - endothelin-1

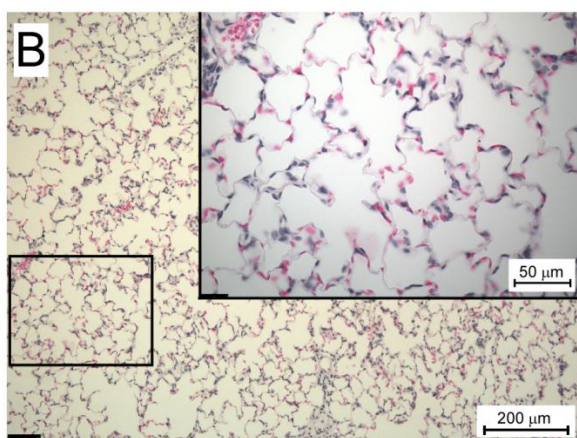
Supplemental Figure 1: Experimental Design. The primary intent of our study was to determine if cardiac ischemia/reperfusion (I/R) injury would be exacerbated if initiated 24 hours following an IT exposure to C₆₀ in male rats. The secondary intent of our study was to test isolated coronary artery smooth muscle responses indicative of enhanced coronary tone and serum cytokines concentrations suggestive of inflammation. We also sought to see if any exacerbated cardiac I/R injury response and the potential contributing factors would be unique to IT exposure by comparing it to IV exposure. We further assessed I/R, coronary artery smooth muscle responses and serum cytokine concentrations in female rats following both exposure routes to test gender specific responses to C₆₀ exposure.

Naïve

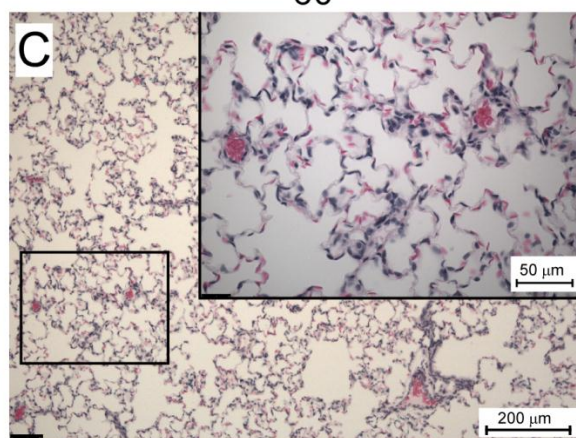


Vehicle

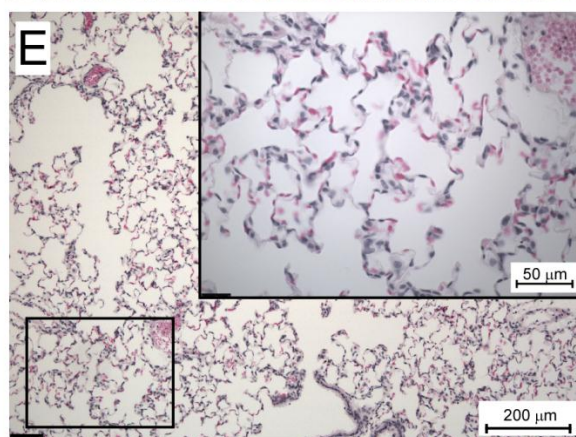
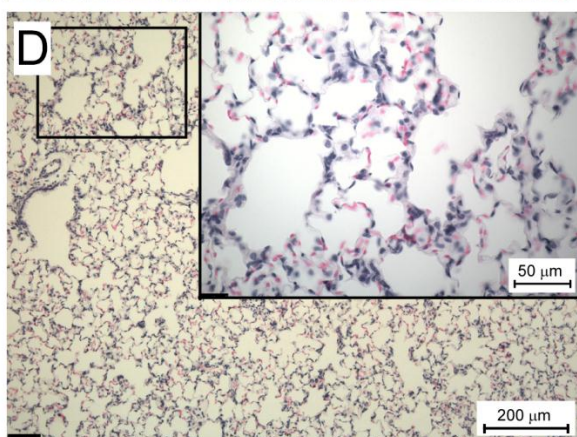
IT



C₆₀



IV



Supplemental Figure 2: Female Rat Left Lung Histology. To visually assess pulmonary responses to C₆₀ exposure in female Sprague-Dawley rats, sections of the left lung (5 µm) were stained with hematoxylin and eosin, and examined by light microscopy at 10x and 40x (inlays) magnification. (A) Representative images from a naïve female rat. (B) Representative images from a female rat intratracheally (IT) exposed to the polyvinylpyrrolidone vehicle. (C) Representative images from a female rat IT exposed to C₆₀. (D) Representative images from a female rat intravenously (IV) exposed to vehicle. (E) Representative images from a female rat IV exposed to C₆₀.